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**Donald C. Brittingham**  
Director – Wireless/Spectrum Policy

October 21, 2004

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room TW-A325  
Washington, D.C. 20554

**Re: *Ex Parte* Presentation  
WT Docket No. 03-103; “Air-Ground Telecommunications Services”**

Dear Ms. Dortch:

In response to questions from FCC staff, this letter provides additional information about Verizon Airfone’s (“Airfone”) plans for providing wireless access to broadband Air-to-Ground (“ATG”) services inside the aircraft cabin.

As Airfone has previously explained, our goal is to provide broadband ATG services to customers on both commercial and general aviation aircraft. These customers want access to the same kinds of broadband services in the air as they’ve come to expect on the ground from both wired (e.g., DSL) and wireless (e.g., EV-DO) technologies, and these services must have a high degree of reliability and availability. While we expect there to be a continued need for some kind of publicly available communications device inside commercial aircraft (e.g., a seat-back phone), most consumers want to access these broadband services using their own communications devices (e.g., laptops, PDAs, and phones). Wireless access provides the most convenience to the customer, while also providing the airlines with an ATG solution that minimizes costs and weight to the greatest extent possible.

When Airfone deploys its broadband ATG service, it intends to provide consumers with wireless access via a WiFi “hot spot” installed on the aircraft. Any passenger with an 802.11-capable device, regardless of their primary service provider, would be able to use Airfone’s broadband network for IP voice, web browsing, VPN e-mail, video/audio/text instant messaging, and a host of other broadband services. Through what will effectively be roaming agreements, wireless companies, ISPs, cable companies, and virtually any other

service provider that provides its customers with WiFi access will be able to provide its customers with comparable access in the air. In this way, consumers will be able to use the service provider of their choice.

While wireless access provides advantages in terms of convenience and cost, it also raises concerns about potential interference to the aircraft's navigation system. Airfone and others in the communications industry are working with the FAA, aircraft manufacturers, and the airline industry to ensure that the use of WiFi devices onboard aircraft does not interfere with the operation of the aircraft. The Radio Technical Commission for Aeronautics ("RTCA"), a Federal Advisory Committee that provides recommendations to the FAA regarding communications, navigation, surveillance, and air traffic management system issues, has established Special Committee 202 ("SC-202") to investigate the use of transmitting portable electronic devices ("TPEDs") onboard aircraft.

Phase 1 of SC-202's work, which addresses the potential for interference from existing TPED technologies such as 802.11-capable devices, has been completed. SC-202 developed a process for determining whether existing TPEDs cause interference, and RTCA recently published a document describing this process. SC-202 has not approved the use of any specific TPED onboard aircraft, and it will be up to individual airlines (with approval of the FAA) to decide what devices can be used. Some airlines, however, have already authorized use of WiFi devices, and we anticipate broad approval of such devices prior to our commercial launch of the broadband ATG service.

Phase 2, which is not expected to be completed until the end of 2006, will address the potential for interference from emerging technologies such as ultrawideband and pico-cells. It will involve extensive testing to determine if the process formulated in phase 1 is adequate as written or will need to be modified to ensure sufficient protection from such devices. The use of cellular and PCS frequency bands onboard aircraft will be part of this evaluation. The potential for interference to avionics from cellular/PCS operations exists, and wireless phones are not permitted to be used today onboard aircraft. It is possible that an effective process can ultimately be developed that would allow the use of wireless phones onboard aircraft without the threat of interference to avionics, but a solution has not yet been identified. The potential also exists for wireless phones to interfere with, and receive interference from, ground-based wireless systems. All of these interference issues must be resolved before wireless phones can be used onboard aircraft.

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Pursuant to Section 1.1206(b)(2) of the Commission's Rules, an electronic copy of this letter is being filed for inclusion in the above-referenced docket.

Sincerely,

/s/ Donald C. Brittingham  
Donald C. Brittingham

cc: Bryan Tramont  
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